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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,851	04/19/2001	Jurgen Heuser	Mo-6284/LeA 32,990	6320

7590

11/14/2003

Patent Department
Bayer Corporation
100 Bayer Road
Pittsburgh, PA 15205-9741

EXAMINER

WITHERSPOON, SIKARL A

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 11/14/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,851

Applicant(s)

HEUSER ET AL.

Examiner

Sikarl A. Witherspoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Response to Amendment***

The declaration under 37 CFR 1.132 filed October 31, 2003 is insufficient to overcome the rejection of claims 2-5 and 8 based upon 35 U.S.C. 103(a) as set forth in the last Office action because: applicants have not shown any correlation between an increased pressure, as per the specific pressure limitation recited in the instant claims, and a reduced carbon tetrachloride (CCl₄) content in the phosgene produced by the claimed process. Applicants may want to consider submitting a *side-by-side* comparison of applicants' process versus the prior art process, wherein there is only one variable, i.e. pressure. In such an instance, applicants should keep the temperature constant while showing the carbon tetrachloride content at standard pressure and at the pressure recited in the instant claims.

The following rejection has been maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cicha et al (WO 97/30932). The instant claims are drawn to a process for producing phosgene which is low in carbon tetrachloride content by the reaction of

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carbon monoxide with chlorine in the presence of elemental carbon, in a reactor, wherein the gas stream emerging from the reactor is at a temperature of 30 to 80° C and under a pressure of 120 to 400 kPa.

Cicha et al teaches a process for preparing phosgene by reacting carbon monoxide with chlorine in the presence elemental carbon at a temperature of 40-300° C, preferably, 50-150°C. The phosgene produced has a carbon tetrachloride content of less than 300 ppm, preferably, less than about 100 ppm (p 3, lines 18-32).

Cicha et al differs from the instant invention in that applicants' process recites a specific pressure range, while Cicha et al does not recite a pressure. As such, it is assumed that Cicha's process is conducted at standard pressure, which is 101 kPa. The instant claims are rendered obvious in view of Cicha et al absent a showing of unexpected or superior results. The difference in pressure between 101 and 120 kPa is minimal, and such a range is well within the experimental range that one of ordinary skill in the art would employ in attempting to optimize process results.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cicha et al as applied to claims 2-4 and 8 above, and further in view of Obrecht, (U.S. 4,231,959). The instant claim is drawn to carbon monoxide having a methane content of 50 ppm at most. Cicha et al do not teach such a limitation. However, Obrecht teaches a process for preparing phosgene where in carbon monoxide comprising 0.12 mole percent of methane is reacted with chlorine. Although Obrecht does not specifically teach 50 ppm of methane, the reference shows that trace amounts of methane may be present in the carbon monoxide. It would have been suggested to one

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of ordinary skill in the art to modify the amount of methane presence in the carbon monoxide reactant, with the motivation of optimizing the concentration of phosgene produced.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

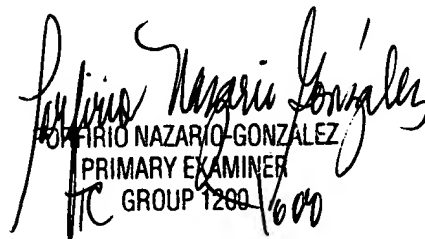
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 703-605-1206. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 703-308-4532. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4556.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Sikarl A. Witherspoon
Patent Examiner
Technology Center 1600


PORFIRIO NAZARIO-GONZALEZ
PRIMARY EXAMINER
GROUP 1200